CLAIMS

What is claimed is:

1. A mobile unit comprising:

a global positioning system (GPS) receiver to receive at least one signal from at least one satellite;

a communication transceiver to communicate with a base station; and

a data bus to carry a signal from said GPS receiver to a memory unit and to carry data from said communication transceiver to an audio/video apparatus.

2. The mobile unit according to claim 1, further comprising a controller able to regulate communication between the mobile unit and the base station.

3. The mobile unit according to claim 2, further comprising a GPS hardware unit to calculate pseudo-range information from the at least one satellite signal.

4. The mobile unit according to claim 3, further comprising a digital signal processor to process the communication signal.

5. The mobile unit according to claim 4, wherein the digital signal processor performs pseudo range calculations.

6. The mobile unit according to claim 5, further comprising a processing accelerator to perform part of said pseudo range calculations.

7. The mobile unit according to claim 3, wherein said communication transceiver transmits the pseudo range data to the base station.

8. The mobile unit according to claim 7, wherein said communication transceiver receives position data from the base station.

9. The mobile unit according to claim 1, wherein the communication transceiver does not transmit while the GPS receiver is receiving a signal.

10. The mobile unit according to claim 1, wherein the audio/video apparatus is a speaker or a visual display.

11. A system for determining location comprising:

a mobile unit comprising:

a GPS receiver to receive a signal from a satellite;

a dipole antenna;

a communication transceiver to communicate with a base station via said dipole antenna; and

a data bus to carry a signal from said GPS receiver to a memory unit and to carry data from said communication transceiver to an audio/video apparatus; and

a time division multiple access base station to communicate with said mobile unit and to calculate a position of said mobile unit based on data received from said mobile unit.

12. The system according to claim 11, further comprising a controller to regulate communication between the mobile unit and the base station.

13. The system according to claim 12, further comprising a GPS hardware unit to calculate pseudo-range information from the satellite signal.

14. The system according to claim 13, further comprising a digital signal processor to process the communication signal.

15. The system according to claim 14, wherein the digital signal processor performs pseudo range calculations.

16. The system according to claim 15, further comprising a processing accelerator to perform part of said pseudo range calculations.